

**PHOTOGRAPHS OF TEMPORARY PARSHALL FLUME
INSTALLATIONS FOR PHASE I RFI
DATA COLLECTION IN
OPERABLE UNIT NUMBERS 5 AND 6
AT THE ROCKY FLATS PLANT**

April 1993

Prepared For:

U.S. Department of Energy,
Rocky Flats Office

Prepared By:

EG&G Rocky Flats, Inc.,
Environmental Protection Department
Surface Water Division

ADMIN RECORD

U No

| |
|------------------------------------|
| REVIEWED FOR CLASSIFICATION/UCNI |
| BY <u>G. T. Ostdiek</u> <u>120</u> |
| DATE <u>7-12-93</u> |

A-OU05-000192

PURPOSE AND SCOPE

This document contains a collection of photographs of temporary Parshall flume installation locations in the Woman Creek and South Walnut Creek drainages at the Rocky Flats Plant (RFP). The flumes were installed in order to provide accurate stream-flow data for the Operable Unit Numbers 5 and 6 (OU5 and OU6 respectively) Phase I RCRA Facility Investigations. The photographs contained herein provide representations of wetland habitat at each OU5 and OU6 flume installation site prior to, and subsequent to each flume's installation. Photographs will be taken by EG&G Rocky Flats, Inc. when each of the flumes are removed from their installation locations to document the appearance of each site after removal of the flume. These photographs will demonstrate that no adverse impact to RFP wetlands will result from the flume installations.

The flumes were instrumented with a continuously recording flow meter and an automatic water sampler approximately two weeks after the flumes were photographed. This instrumentation is not shown herein. Each flume will remain in place for one year or until it is replaced by a permanent H-flume installation (EG&G, June 12, 1992); whichever comes first.

FLUME INSTALLATION LOCATIONS

The approximate location for each flume installation is shown on Figures 1 and 2. These locations were selected jointly by the U.S. Department of Energy, EG&G, and the Colorado Department of Health (CDH). CDH provides technical evaluation and leadership for directing the scope of the OU5 and OU6 RFI activities.

All but one of the installations includes a nine-inch throat Parshall flume with wing walls built from plywood and 2" X 2" lumber. A tarp is used to seal the stream bed upstream from the flume in order to direct all of the stream flow into the flume. Sandbags are placed on top of the tarps to seal them against the stream bed and stabilize the wing walls. Station SW034 (Gaging Station GS16) on Antelope Springs Creek is equipped with a six-inch throat Parshall flume instead of the nine-inch size. Large snowmelt events in March and April 1993 have been observed to overtop the flumes. Therefore, their capacity is limited to measuring baseflow and most low-intensity storm runoff flows.

PHOTOGRAPHY

The 8" X 10" photographs contained herein were taken by Mr. Kim Ortiz of EG&G Photography Department. Polaroid photographs were taken by Mr. Michael Freehling of the Environmental Protection Management Department, Surface Water Division. The Polaroids were taken in order to expedite installation of the flumes to comply with the OU5 field sampling schedule.

NORTHEAST QUADRANT

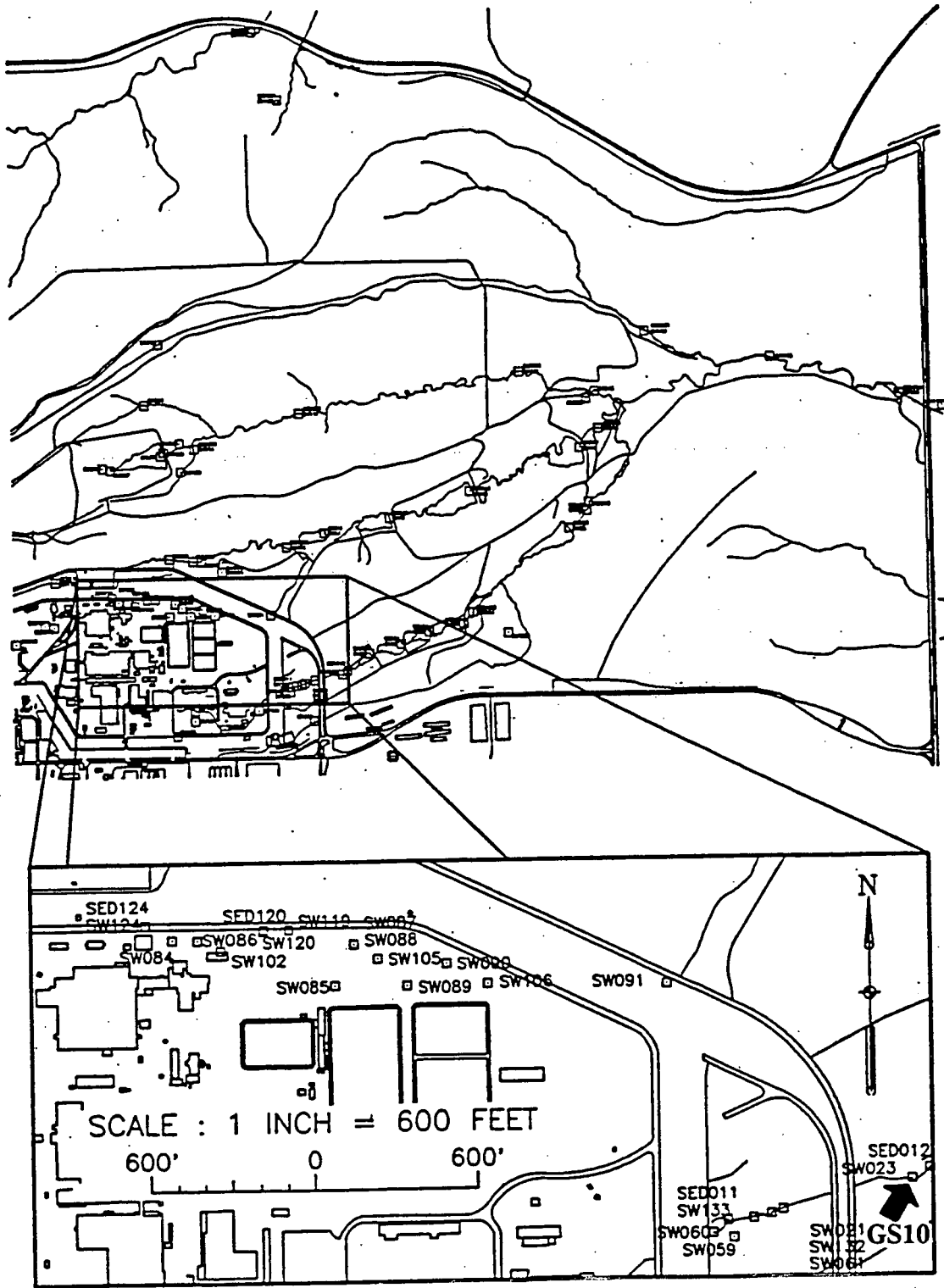
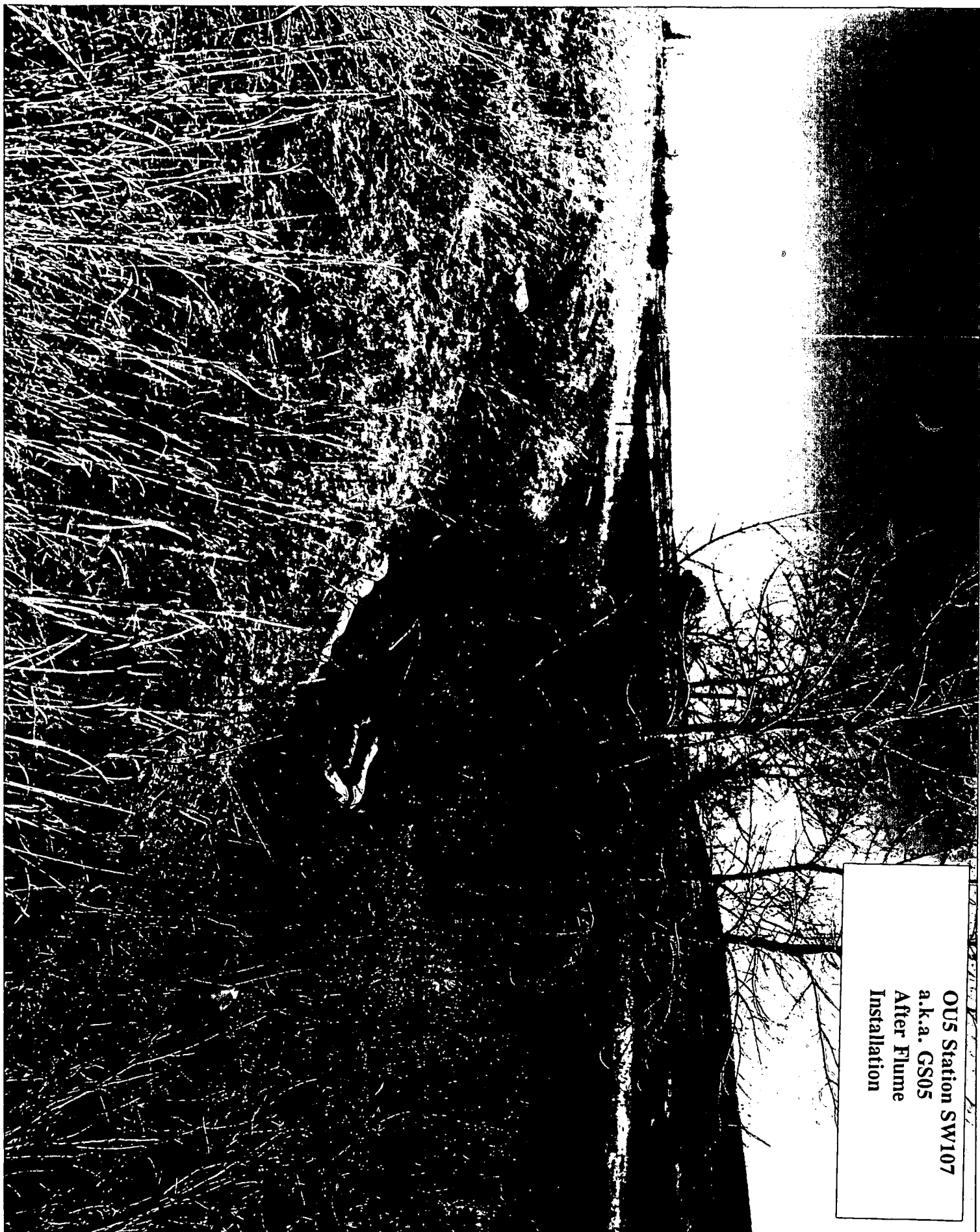


Figure 1.--Location of Gaging Station GS10.

Prepared by :RLB
Date : 2/19/92

OUS Station SW107
a.k.a. GS05
After Flume
Installation



ON & G ROCKY FLATS.

MAR 26 1993

44550-06

PLEASE REORDER
BY NUMBER

OU5 Station SW107
a.k.a. GS05
After Flume
Installation



EG & G ROCKY FLATS

44550-07

PLEASE REORDER
BY NUMBER

MAR 26 1993

OUS Station SW127
a.k.a. GS06
After Flume
Installation



EG & G ROCKY FLATS

44 550 - 04

PLEASE REORDER
BY NUMBER

MAR 26 1993

**OU5 Station SW506
a.k.a. GS18
Before Flume Installation**



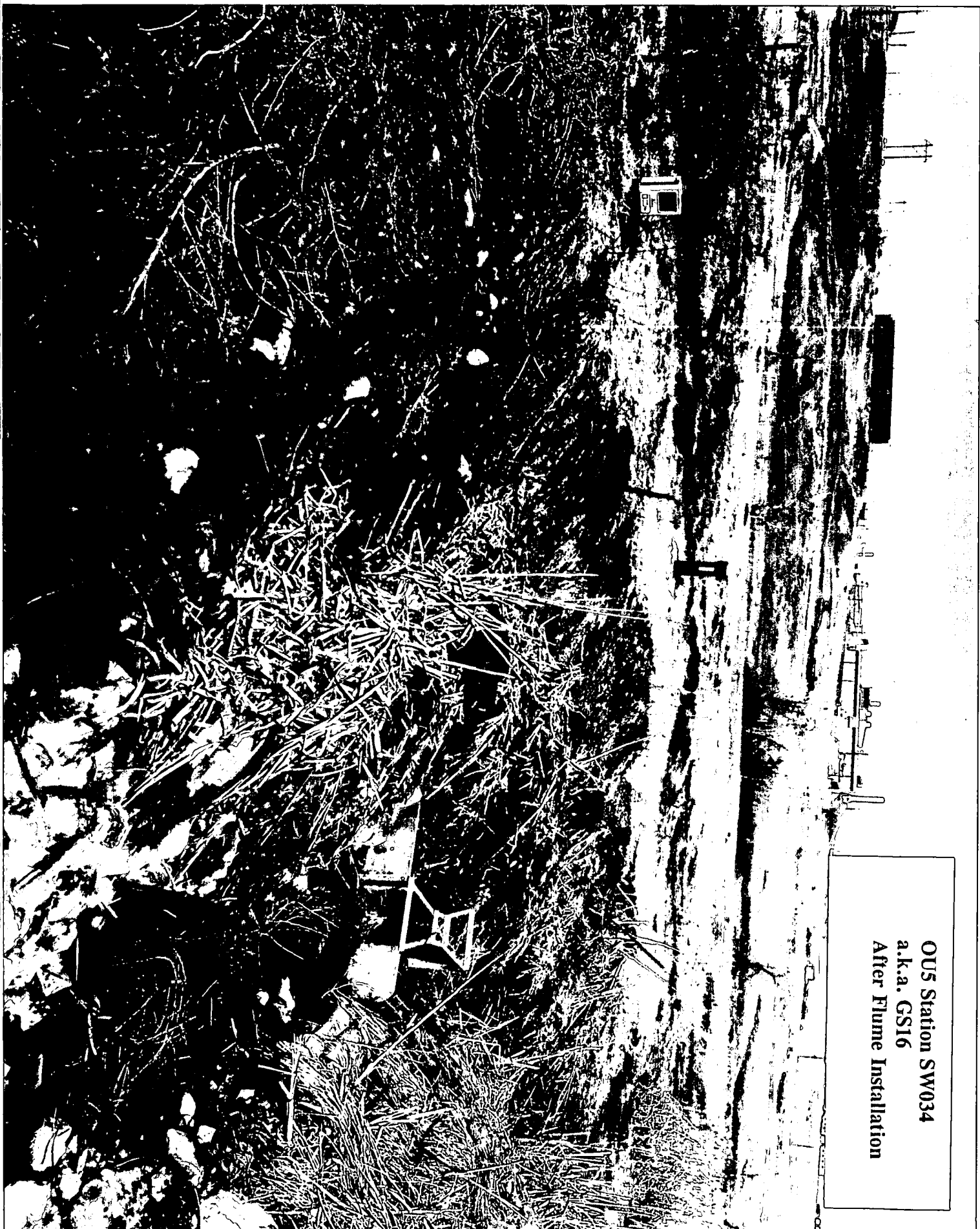
MAR 10 1993

ER & G ROCKY FLATS.

44430-09

PLEASE REORDER
BY NUMBER

OU5 Station SW034
a.k.a. GS16
After Flume Installation



NO. 3 ROCKY FLINT

MAR 26 1993

44550-01

PLEASE RETURN
BY NUMBER

OU5 Station SW506
a.k.a. GS18
After Flume Installation



MAR 26 1993

ER & G ROCKY FLATS

44550-10

PLEASE REORDER
BY NUMBER

OU5 Station SW501
a.k.a. GS17
Before Flume Installation



MAR 26¹⁰ 1993

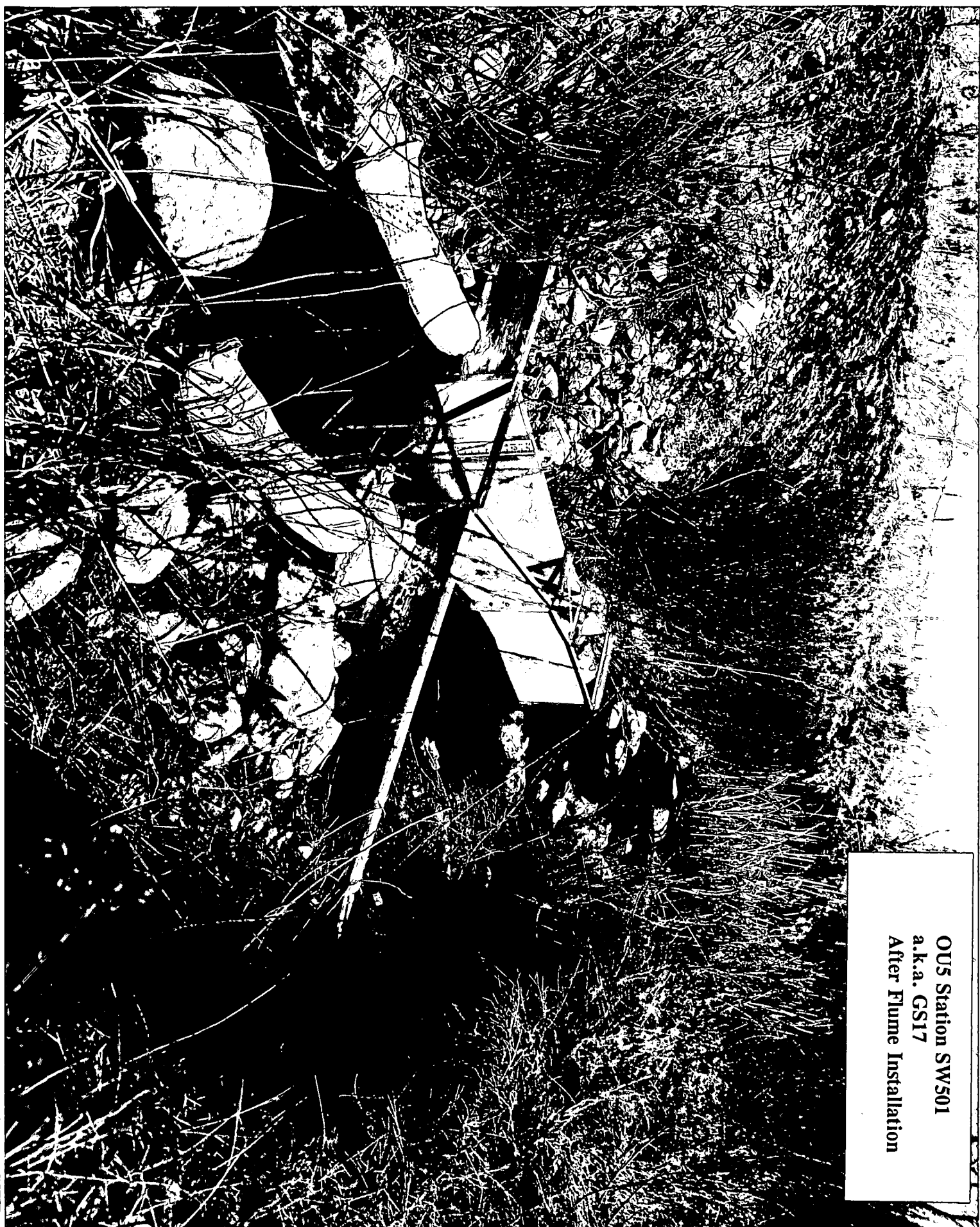
EG & G ROCKY FLATS

~~44430-04~~

~~44550-13~~

PLEASE REORDER
BY NUMBER

OU5 Station SW501
a.k.a. GS17
After Flume Installation

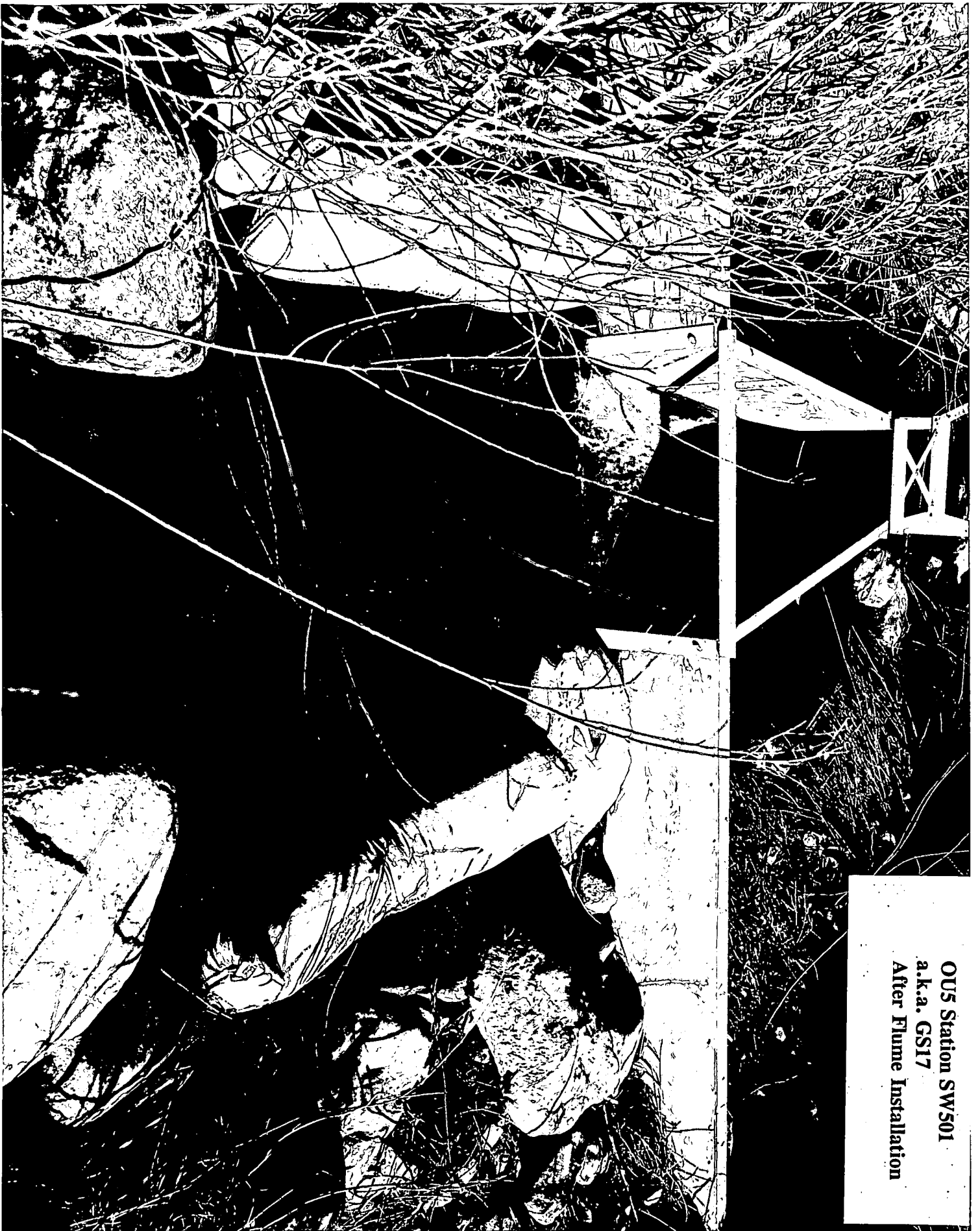


EG & G ROCKY FLATS

MAR 26 1993

44550-13

PLEASE REORDER
BY NUMBER



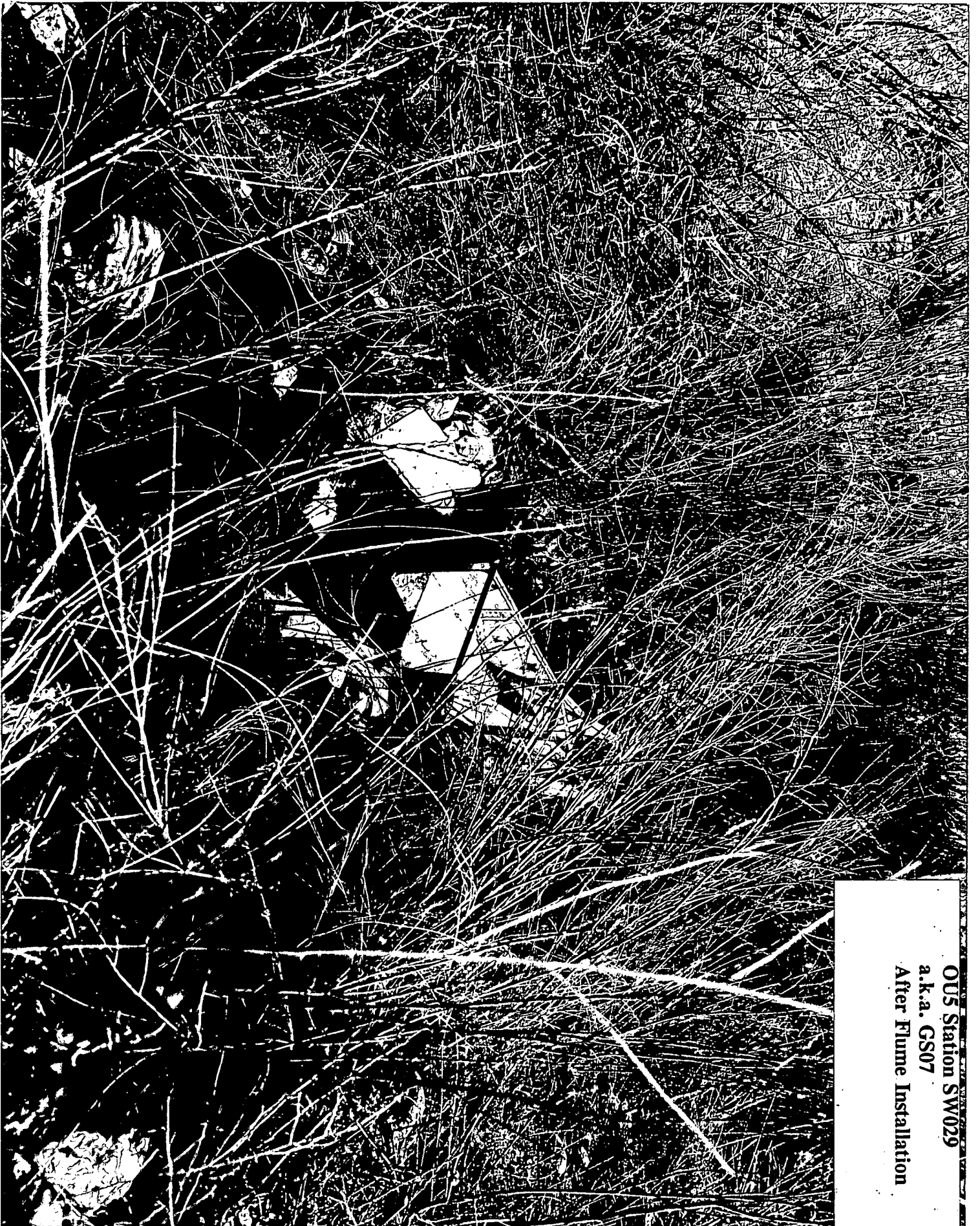
OU5 Station SW501
a.k.a. GS17
After Flume Installation

IG 2: G ROCKY FLATS.

44430-01

PLEASE REORDER
BY NUMBER

MAR 10 1993



OU5 Station SW029
a.k.a. GS07
After Flume Installation

MAR 10 1993

TR & G ROCKY FLATS,

44432-08

PLEASE REORDER
BY NUMBER

OU5 Station SW029
a.k.a. GS07
After Flume Installation



MAR 10 1993

40 & G ROCKY FLATS

44432-05

PLEASE REORDER
BY NUMBER

OU5 Station SW026
a.k.a. GS14
Before Flume
Installation



MAR -5 1993

EG & G ROCKY FLATS

44434-12

PLEASE REORDER
BY NUMBER

OU5 Station SW026
a.k.a. GS14
After Flume
Installation



MAR -8 1993

EG & G ROCKY FLATS

44433-16

PLEASE REORDER
BY NUMBER

OU5 Station SW026
a.k.a. GS14
After Flume
Installation



32 G ROCKY FLINT

4433-18

PLEASE REORDER
BY NUMBER

MAR -8 1993

OU5 Station SW034
a.k.a. GS16
Before Flume Installation



MAR 26 1993

EG & G ROCKY FLATS

44549-07

PLEASE REORDER
BY NUMBER



OU5 Station SW034
After Flume
Installation



AS & G ROCKY FLINT

44550-02

PLEASE REORDER
BY NUMBER

MAR 26 1993



OU5 Station SW034
a.k.a. GS16
After Flume
Installation



28 G ROCKY FLATS

MAR 26 1993

44549-01

PLEASE REORDER
BY NUMBER

OU6 Station GS10
Before Flume
Installation



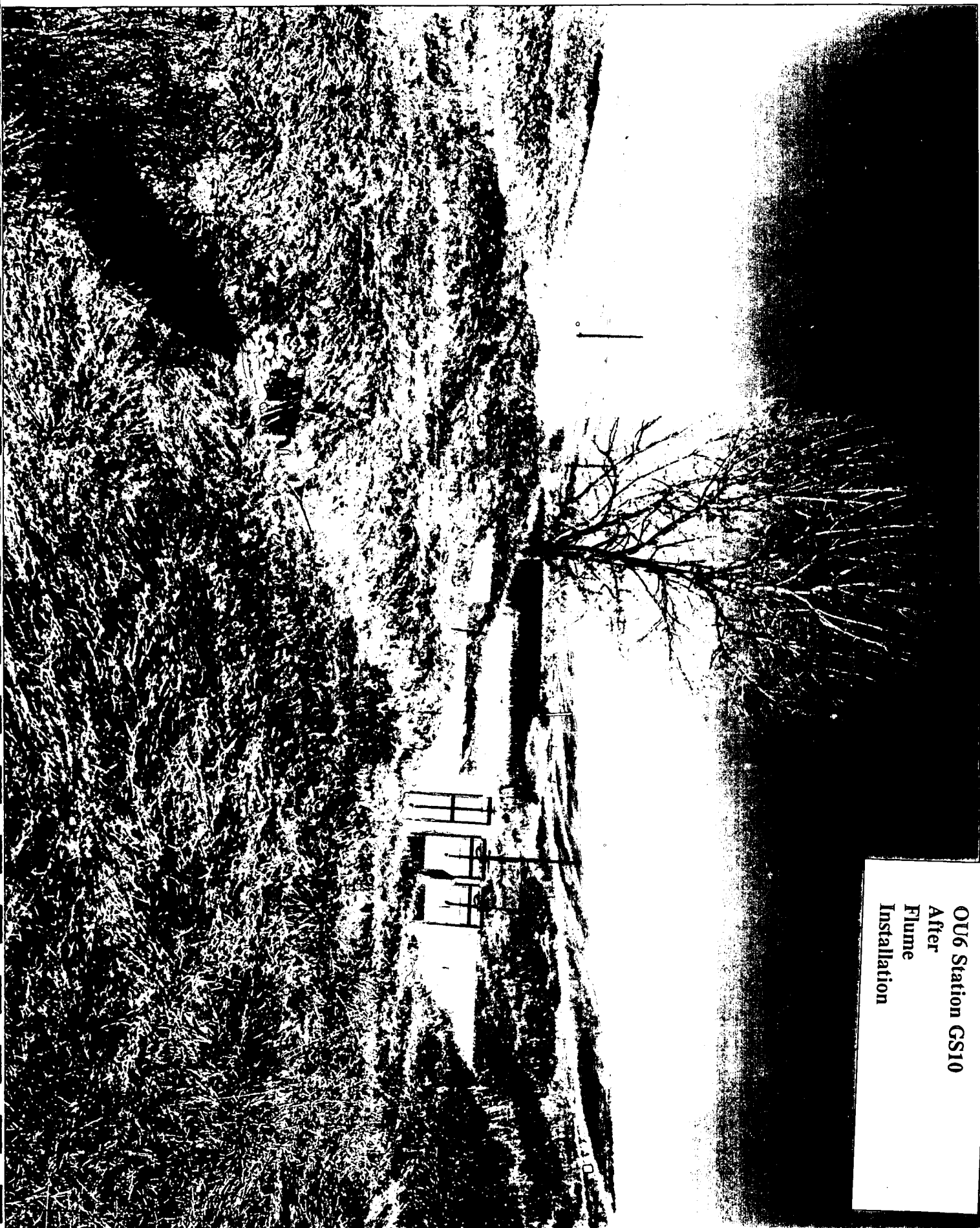
330 S ROCKY FLITE

42638-07

PLEASE REORDER
BY NUMBER

SEP 24 1991

OU6 Station GS10
After
Flume
Installation



MAR 26 1993

388 ROCKY FLATS

44550-23

PLEASE REORDER
BY NUMBER

OU6 Station GS10
After Flume
Installation



44550-24

PLEASE REORDER
BY NUMBER

HAR 26 1 993

